



As of March 2016

PURPOSE

This document contains summary information regarding the Iowa Department of Education’s review of PK-12 literacy interventions. Interventions represented in this document include those submitted directly by vendors in response to a department released Request for Information/Request for Proposal, and those indicated as interventions most used in Iowa based on a survey conducted in 2014. The list of reviewed interventions in this document are not intended to be an exhaustive list. The purpose of this document is to provide general information to help inform educator decisions about selecting interventions to support student progress toward proficiency in the area of reading. The purpose is not to provide a list of Department approved interventions from which districts must select.

TABLE OF CONTENTS

Reviews Described in Brief.....	2
Review Results.....	3
Using the Reviewed Intervention List.....	5
Next Steps.....	5
Definitions.....	6

REVIEWS DESCRIBED IN BRIEF

The Iowa Department of Education [IDE], in collaboration with the Iowa Reading Research Center¹ [IRRC], and contracted national expert, conducted two very different intervention reviews:

1. **Request for Proposal [RFP], 2014.** The purpose of this review was to establish a list of evidence-based interventions for the state at the classwide², targeted³, and/or intensive⁴ levels of support, and provide professional development/coaching on selected class-wide, targeted, and intensive intervention(s)/program(s). Professional development/coaching was contingent on being able to identify one or more evidence-based interventions that (a) met criteria, (b) included the appropriate age-span, and (c) were in an acceptable cost range.
2. **Iowa Reviews, 2015.** The purpose of this review was to build the RFP intervention list by reviewing interventions already in use across Iowa's educators as indicated by the results of a statewide online intervention use survey⁵ conducted in 2014.

Below provides a broad overview of the procedures in the review process:

1. **Intervention Selection.** Interventions were selected for review within the RFP Review as a result of vendor submission in response to a posted Request for Information/Request for Proposal. For the Iowa Review, those interventions that had the highest frequency⁶ of use in Iowa were included in the 2015 review. Strategies were not reviewed.
2. **Study Criteria.** The RFP review was based on evidence [research studies and/or technical reports] submitted by vendors in response to the posted RFI/RFP. The Iowa Review evidence was based on extensive literature reviews. The following study-inclusion criteria were established for the Iowa Review:
 - a If the literature review revealed five or less research studies/technical reports for a given intervention, all five were reviewed;
 - b If the literature review revealed more than five research studies, the following criteria were applied:
 - Studies/technical reports published in peer-reviewed journals – if more than five then,
 - Studies/technical reports published after 2005.
3. **Review Procedures.**
 - a The national expert trained a reviewer team to apply a *Quality Review Rubric*⁷
 - b Two reviewers were assigned the same information to review, independently
 - c Reviewers reconciled discrepancies.
 - d Final scores were recorded.
4. **Criteria Thresholds.** A final review team, including the national expert, established thresholds:
 - a Evidence must be at the acceptable range score across Internal Validity, External Validity and Overall Findings to establish evidence of positive effects for students across studies [RFP and Iowa Review], and/or
 - b Evidence must show at least one study with high internal and external validity and positive findings with no studies showing negative findings. In the case of Intensive Interventions where a single case was used, five or more studies with high internal and external validity and positive findings. [Iowa Review]

¹ Note that the IRRC transitioned out of collaboration with Iowa Reviews Summer 2015

² This included evidence-based interventions or programs shown to be effective with entire classrooms of students.

³ This included evidence-based interventions or programs shown to be effective at Tier 2/targeted level of an MTSS framework.

⁴ This included evidence-based interventions or programs shown to be effective at Tier 3/intensive level of an MTSS framework.

⁵ The online survey was based on the results of a statewide needs assessment published by the Iowa Reading Research Center in 2013: The State of PK-3 Literacy in Iowa.

⁶ Frequency of intervention use by Iowa's educators was based on the results of an online intervention use survey conducted in 2014.

⁷ The RFP Reviews had additional reviewers trained to apply a *Standard Alignment Criteria Rubric* and *Teacher Usability Rubric*. The criteria and all rubrics are available on the Iowa Department of Education site – Evidence-Based Intervention Review Criteria and Review Rubrics.

REVIEW RESULTS

The results of both the RFP Review and the Iowa Review are provided in Review of Intervention Summary in Table 1. The table is organized as follows:

- **Program Name:** The name of the program either as submitted by the vendor [RFP Review] or as indicated in the interventions identified by Iowa educators and indicated within a literature review [Iowa Review].
- **Grade:** The grade the intervention was submitted for review [RFP Review] or as indicated in the study(ies) reviewed [Iowa Review].
- **Instructional Tier:** The instructional tier submitted by the vendor, either classwide, targeted or intensive [RFP Review] or as indicated in the study(ies) reviewed [Iowa Review].
- **Internal Validity:** An intervention must meet the acceptable range for internal validity to obtain a check in Table 1 [RFP Review]. This criteria is met for the Iowa Review if scored at the acceptable range for the Extent of Evidence⁸.
- **External Validity:** An intervention must meet the acceptable range for external validity to obtain a check in Table 1 [RFP Review]. This criteria is met for the Iowa Review if scored at the acceptable range for the Extent of Evidence.
- **Overall Findings:** An intervention must meet the acceptable range for overall findings to obtain a check in Table 1 [RFP Review]. This criteria is met for the Iowa Review if scored at the acceptable range for the Extent of Evidence.
- **Extent of Evidence:** An intervention must meet the following criteria to obtain a check in Table 1 [Iowa Review]: One study with high internal and external validity and positive findings with no studies showing negative findings. In the case of Intensive Interventions where a single case was used, five or more studies with high internal and external validity and positive findings.
- **Review Type:** This column indicates whether an intervention was reviewed using the RFP Review criteria or the Iowa Review criteria.

A checkmark indicates the intervention met specified criteria set for the category listed.

⁸ To score at the acceptable range in the Extent of Evidence, the study had to have met the acceptable range across internal validity, external validity and overall findings.

TABLE 1. REVIEW OF INTERVENTIONS SUMMARY

Program	Grade	Instructional Tier	Internal Validity	External Validity	Overall Findings	Extent of Evidence	Review Type
Access Code	1-6	Targeted		✓			RFP
Achieve Intervention	2-12	Classwide, Targeted, Intensive		✓	✓**		RFP
Corrective Reading	3-6+	Intensive		✓	✓		Iowa
Corrective Reading	3-6+	Targeted			✓		Iowa
Earobics	PK3-3	Classwide, Targeted, Intensive		✓	✓		RFP
Fast ForWord	K-12	Classwide, Targeted, Intensive	✓	✓	✓		RFP
Fountas and Pinnel Leveled Literacy Intervention	K-5	Targeted, Intensive	✓	✓	✓	✓	Iowa
Imagine Learning	PK4-6	Intensive		✓	✓		RFP
Jolly Phonics	K	Classwide		✓	✓		Iowa
LANGUAGE! Live	4-12	Intensive		✓			RFP
Lexia Reading Core5	PK4-5	Classwide, Targeted, Intensive	✓	✓	✓		RFP
Minnesota Reading Corps	PK-3	Targeted, Intensive	✓	✓	✓	✓	Iowa
Multisyllable Routine Cards with Phonics Screener for Intervention	2-6	Classwide, Targeted, Intensive					RFP
Path to Literacy	PK4	Targeted, Intensive	✓	✓	✓		RFP
Phonics Chip Kits and Phonics Screener for Intervention	2-6	Classwide, Targeted, Intensive		✓			RFP
Phonics Lesson Library and Phonics Screener for Intervention	2-6	Targeted, Intensive	✓	✓			RFP
Phonological Awareness and Phonological Awareness Screener for Intervention	K-1	Classwide, Targeted, Intensive					RFP
PRESS Partner Reading with Paragraph Shrinking	2-6	Classwide	✓	✓	✓		RFP
PRESS Tier 2 Interventions	K-6	Targeted		✓	✓		RFP
READ 180 Next Generation	4-12	Intensive	✓	✓			RFP
Read Naturally	1-6+	Targeted, Intensive	✓	✓	✓	✓	Iowa
Reading Horizons Discovery	PK4-3	Classwide, Targeted, Intensive		✓	✓		RFP
Reading Horizons Elevate	4-12	Targeted, Intensive					RFP
Reading Mastery	PK-5	Classwide	✓	✓	✓	✓	Iowa
Reading Mastery	PK-5	Targeted, Intensive	✓	✓			Iowa
Reading Recovery	1	Intensive	✓	✓	✓		RFP
REWARDS	4-12	Targeted	✓	✓	✓		RFP
Six Minute Solution	K-12	Classwide					Iowa

Program	Grade	Instructional Tier	Internal Validity	External Validity	Overall Findings	Extent of Evidence	Review Type
SPELL-Links to Reading and Writing Word Study Curriculum	K-12	Classwide, Targeted, Intensive		✓	✓		RFP
Step Up to Writing	K-12	Targeted			✓		RFP
Story Friends	PK4	Targeted, Intensive	✓	✓	✓		RFP
System 44 Next Generation	3-12	Intensive		✓			RFP
Treasures	K-6	Classwide	✓		✓	✓	Iowa
Visual Phonics	***	Intensive	✓	✓			Iowa
Wilson	2-6+	Targeted, Intensive	✓	✓	✓	✓	Iowa
Words Their Way	K-6+	Targeted, Intensive		✓			Iowa

This list is alphabetized by vendor and does not reflect any rank-order.

**Established EV in elementary studies only.

***Indicated for children and adults, grade not specified.

USING THE REVIEWED INTERVENTION LIST

The updated Reviewed Intervention List may be used to:

- Guide intervention/program selection;
- Engage in critical conversations regarding what is an evidence-base, Instructional Tiers, and/or research;
- Discuss how to review, identify or select evidence-based interventions; and
- Discuss differences in review types, and the strengths/challenges of conducting such reviews.

The updated Reviewed Intervention list may not be used as an IDE approved list of interventions or an exhaustive list of reviewed interventions.

NEXT STEPS

Future Iowa Reviews are scheduled to occur in the 2016-2017 year. If the reviews are able to be conducted, the Iowa Review criteria will be used to establish evidence. Further, interventions will be identified based on a review of literature that indicates emerging and/or existing evidence of efficacy. In addition, the current RFP Review list will be included in subsequent Iowa Reviews. The timeline for continued reviews is contingent on resources and funding.

DEFINITIONS

Class-wide Intervention/Program

A classwide intervention/program includes one or more of the following: foundational literacy skills (for example, print concepts, phonological awareness, alphabet knowledge, phonics/decoding, fluency), irregular/sight words, oral language, vocabulary, comprehension, spelling and writing. Classwide intervention is implemented with an entire class of students. This would be implemented in addition to core literacy instruction in classrooms with a large numbers of students are not at benchmark. -adapted from Ch62 Guidance (12/4/15)

Extent of Evidence (Study Findings)

There are two ways to look at the evidence from a research study: statistical significance and practical significance. Statistical significance indicates if the findings are true differences between the groups studied due to the intervention, and that there is a low probability of the findings being due to chance (at $p = .05$ the probability of the result being by chance is less than one in 20). Practical significance provides an indication of the magnitude of the intervention's effect. The larger the effect size, the larger the impact of the intervention. An effect size of .25 or greater is desired. Replication of positive findings across multiple studies is also desired. ***This category was used as criteria to identify the extent of evidence for the interventions. An intervention must meet the acceptable range to be considered as meeting the Overall Findings Criteria and therefore obtain a check in Table 1.***

External Validity

External validity addresses the extent to which the study and its findings apply to other practical settings beyond the controlled research study. External validity criteria were: Implementation, Reading Domains Addressed, Student Outcomes Measured, and Treatment Acceptability. ***This category was used as criteria to identify external validity of evidence-based interventions. An intervention must meet the acceptable range to be considered as meeting the External Validity Criteria and therefore obtain a check in Table 1.***

Intensive Intervention/Program

An intensive intervention/program is one that includes one or more critical literacy skills typically implemented at the small group or individual learner level. Students are matched to intensive interventions based on their instructional needs. This is provided in addition to instruction in the Universal Tier.

Intensive Interventions and Single-Case Designs

The purpose of intensive reading interventions is to address significant and persistent reading difficulties and includes individualization of the intervention. As such, there is a special kind of research study called single-case design that can be used to examine intensive intervention impact. Many of the same internal validity criteria described above also apply to single-case design. Single-case designs systematically manipulate the intervention within and across students to show an intervention's causal effect. It also requires a stable baseline prior to intervention implementation, and at least 3 replications at different points in time. All previously listed external validity criteria apply to single-case design as well.

Internal Validity

Internal validity addresses how well a research study was designed to reduce the impact of things not being studied. In well-designed intervention studies, we can be confident that positive results are due to the intervention, and not things outside of the study. Internal validity criteria were: Research Design, Evidence of Confounding Factors, Group/Person Conducting the Study, Developer of Assessment, Data Collection and Adequacy of Measures, and Data Analysis Methods. ***This category was used as criteria to identify internal validity of evidence-based interventions. An intervention must meet the acceptable range to be considered as meeting the Internal Validity Criteria and therefore obtain a check in Table 1.***

Multi-Tiered System of Supports (MTSS)

A multi-tiered system of supports (MTSS) is a process where schools use data to identify academic and behavioral needs of students, match student needs with evidence-based instruction and interventions, and monitor student progress to improve educational outcomes.

Standards Alignment

Interventions should focus on the knowledge and skills defined in state requirements. These requirements are found in the Iowa Early Learning Standards and Iowa Core Standards. Vendors needed to illustrate an effort to establish a high-quality process to verify alignment of the intervention content with the Iowa Early Learning Standards and/or Iowa Core Standards. Standards alignment criteria were: Standard Identification, Amount of Alignment, Replicability, Content Definition & Specificity, Inter-rater Reliability, Conductor of Alignment Study, and Misalignments. ***This category was used as criteria to identify standards alignment of evidence-based interventions. An intervention must have submitted materials using the online submission system, and must illustrate an effort to establish a process to align intervention content with preschool learning standards and/or the Iowa Core to obtain a check in Table 1.***

Standard Treatment Protocol

A standard treatment protocol is a targeted intervention/program that includes more than one critical literacy skill implemented with groups of students. Students are assigned to a standard treatment protocol based on a standard set of criteria. This is provided in addition to instruction in the Universal Tier.

Teacher Usability

An area critical to implementation and sustainability of an intervention is teacher usability. This is defined by the user-friendliness of the intervention, the credibility or trustworthiness/reputability of the intervention, the potential for the content to support ease of teacher use in the classroom, and establishing that the materials are free of race and/or gender bias.